THE S. W. SHATTUCK CHEMICAL COMPANY, INC., HAER No. CO-71-B
BUILDING NO. 3
(Office and Radium Building)
1805 South Bannock Street
Denver
Denver County
Colorado

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Rocky Mountain Regional Office
P.O. Box 25287
Denver, Colorado 80225

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Historic American Engineering Record

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Building No. 3
(Office and Radium Building)

HAER No. CO-71-B

Part I. Introduction

Location: Building No. 3 (Office and Radium Building) of the S. W. Shattuck Chemical Company, Inc. is located at 1805 South Bannock Street in the City and County of Denver, Colorado (Shattuck site). The Shattuck site is located approximately 4 miles south of Denver's downtown area near the intersection of Evans Avenue and Broadway.

Quadrangle: U. S. Geological Survey, Englewood 7.5-minute topographic quadrangle, dated 1965, photorevised 1980.

Date of Construction: Early Sanborn maps label the eastern-most section of this building being constructed in 1911.

Present Owner: The S. W. Shattuck Chemical Company, Inc.
1805 South Bannock Street
Denver, Colorado 80223

Present Use: Mineral processing operations at the Shattuck site ceased in April of 1984 due to poor economic conditions associated with molybdenum and rhenium metals. The site is currently undergoing environmental remediation in accordance with the terms of a Superfund Record of Decision issued by the U. S. Environmental Protection Agency ("EPA") on January 28, 1992.

Significance: The significance of the Shattuck site arises from its role in processing various metals since 1918. At various periods of time, molybdenum compounds, radium, uranium compounds, and rhenium were produced at the site. From about 1934 to the early 1940's, Shattuck was one of only two companies in the U. S. that produced radium salts; although, collectively both companies produced only a small percentage of the radium used in the U. S. during that period.

Prepared By:

Historic Narrative: Steven F. Mehls, Project Historian, Western Historical Studies, Inc. June 1993

Architectural and Historical Engineering Processes Information: Nenon A. Anderson, AIA, Andrews & Anderson, July and October 1992.

Photography: Arnold Thallheimer, April and May 1992

Building No. 3

Early Sanborn maps label the eastern-most section of this building, built in 1911, as storage. Storage seemed to be this section's main function although the north end housed a boiler room at one time (See Photograph, HAER No. CO-71-B-10). Corresponding to Shattuck's entry into the radium processing business, the main portion of Building No. 3 was constructed in 1934 (See Photograph HAER No. CO-71-B-1). First built as an adjacent but non-contiguous structure to the 1911 building, a 1939 infill addition connected the two building portions (See Photograph, HAER No. CO-71-B-5).

Carnotite ores mined on Colorado's western slope were processed to produce radium slimes which were shipped to the Shattuck site. In Building No. 3 the slimes were treated with carbonates to convert the sulfate-slimes to carbonates. The carbonates were then treated with hydrochloric acid to convert the radium/barium carbonates to chlorides after which the radium and barium chlorides were separated by fractional crystallization. The radium chloride was converted to radium bromide and packed in glass capsules (K tubes). The K-tubes were sold to hospitals for cancer treatment.[1]

It is uncertain how the original Building No. 3 was used in the 30 years following Shattuck's termination of radium processing in about 1942 or 1943. A 1969 site plan refers to a new addition as the maintenance shop and R & D lab and a second addition is referred to as the maintenance lunch room[2]. A 1978 plan shows proposed remodeling for the first addition but it is unknown if that remodeling was ever performed[3]. In 1985, much of the first addition was remodeled as office space which is its current use. Other than these site and recent floor plans, there is no available information on the building's use during the 1940's and 1950's, no extant equipment, and we know of no oral informants who were familiar with the building's 1940 and 1950 operations.

General Description

The three sections of Building No. 3 form an irregular rectangle 45' x 115' oriented on an east-west axis. On the east end is the one-story poured-concrete storage building. As was typical of its era, this building was poured in board-formed lifts. The north and south walls formed stepped parapets to indicate the major facades (corrugated asbestos siding). Between the concrete building and the 1934 addition is a one-story transite-over-wood frame addition constructed in 1939. Its form is utilitarian. The 1934 addition is a 1 1/2-story industrial building. Constructed of transite-over-wood frame, its distinguishing feature is a full-length, 3-foot-high, ridge monitor which reveals vents and windows on the interior covered over on the exterior (See Photographs, HAER No. CO-71-B-1 through 11).

Roof

The east section is constructed of steel frame supporting corrugated metal roofing (See Photograph, HAER No. CO-71-B-2). The west section is constructed of wood trusses and purlins supporting the moderately sloped gable end transite roofing. Wood rafters supporting a shed transite roof make up the middle section's roof (See Photograph, HAER No. CO-71-B-5).

Windows

The east section has no windows (See Photograph, HAER No. CO-71-B-2). The west section displays the original windows which are single or triple wood framed nine-light awnings. Aluminum-framed sliders have been retrofitted into the offices along the south side. (See Photographs, HAER No. CO-71-B-6). Aluminum sliders also fenestrate the middle section (See Photographs, HAER No. CO-71-B-1 and 5).

Doors

There are paired metal doors, 3' x 6', on the south side (See Photograph, HAER No. CO-71-B-3). The east side has one wood man door (See Photograph, HAER No. CO-71-B-5). The north side has three wood man doors (See Photograph, HAER No. CO-71-B-4). The west side has a sectional fiberglass door, 10' x 10' feet with a metal man door (See Photograph, HAER No. CO-71-B-6).

Exterior Features

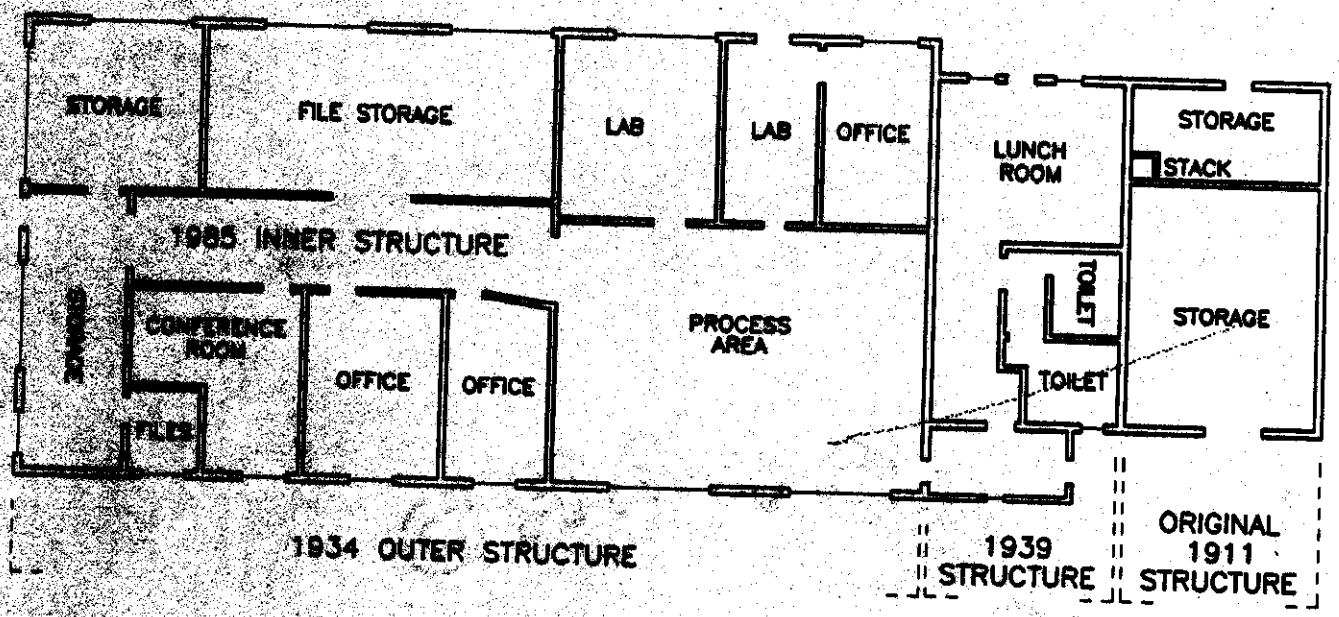
A brick chimney rises from the west side of the east section of the building. Its use was presumably associated with the boiler located in that area (See Photographs, HAER No. CO-71-1 through 4, and 10).

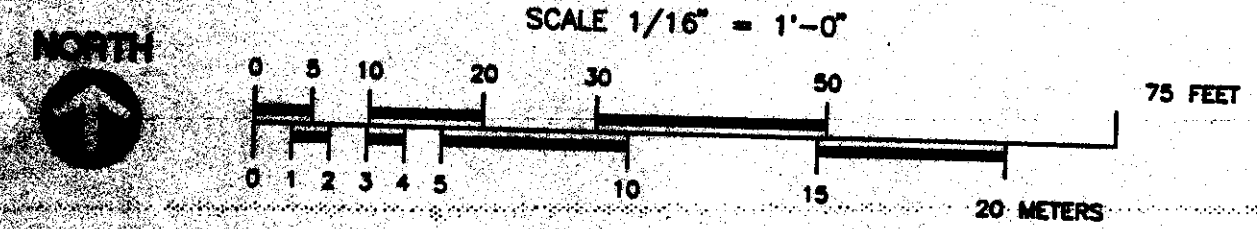
Endnotes

1. Personal Communication, June 29, 1992, Mr. Henry F. Barry, Vice President - Technology, The S. W. Shattuck Chemical Company, Inc. with Nanon Adair Anderson, Historic Architect.

2. 1969 site plan of The S. W. Shattuck Chemical Company, Inc., 1805 South Bannock Street, Denver, Colorado. Filed at the offices of John Faught & Associates, Attorneys at Law, 717

3. 1978 site plan of The S. W. Shattuck Chemical Company, Inc., 1805 South Bannock Street, Denver, Colorado. Filed at the offices of John Faught & Associates, Attorneys at Law, 717 Seventeenth Street, Suite 1580, Denver, Colorado 80202.


STORAGE
FILE STORAGE
LAB
LAB
OFFICE
LUNCH ROOM
STORAGE
STACK
1985 INNER STRUCTURE
TOILET
STORAGE
CONFERENCE ROOM
OFFICE
OFFICE
PROCESS AREA
TOILET
FILES
1934 OUTER STRUCTURE
1939 STRUCTURE
ORIGINAL 1911 STRUCTURE


NORTH
SCALE 1/16" = 1'-0"
0 5 10 20 30 50 75 FEET
0 1 2 3 4 5 10 15 20 METERS